

REMARKS

The Examiner is thanked for the thorough examination of this application, and the indication that claims 8 and 9 contain allowable subject matter. The Office Action, however, tentatively rejected all claims 1-19. Specifically, claims 1, 10, and 17 stand rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Mikami et al (US 6,661,397) in view of Dean (US 2003/0042834). Applicant respectfully traverses the 35 U.S.C. 103(a) rejections for the following reasons.

First, even if the two references are properly combined, they fail to teach all of the elements of the independent claims. For example, **Dean does not teach, disclose or suggest a power supply line having a maximum average current density at a cross section thereof is no grater than approximately 10^5 ampere per square centimeter (A/cm^2).**

In section 2, the Office Action states

“Dean discloses a current density at a cross section of the power supply line is no greater than approximately 10^5 ampere per square centimeter (A/cm^2). See col. 6, line [0052] to col. 7, lines [0053] to [0054]”

However, this cited portion of Dean actually states:

“The FED 10 constructed according to the present invention can have a triode geometry.....; a gate; a switching voltage that is preferably less than about eighty (80) volts and more preferably less than about fifty (50) volts with a cathode current preferably greater than about one-half milliamp per square centimeter ($0.5\text{ mA}/cm^2$), more preferably greater than one and one half milliamp per square centimeter ($0.5\text{ mA}/cm^2$); and a lifetime.....”

As can be readily verified from even a cursory review of this portion of Dean, the cited portion of Dean wholly fails to teach or suggest the claimed feature that the Office Action alleges it to teach. Moreover, according to lines [0052] and [0053] and claim 3, the current density taught by Dean is drawn from the FED 10. The current density is greater than about $0.5\text{ mA}/cm^2$ and preferably greater than about $0.5\text{ mA}/cm^2$. In some conditions, the FED 10 configuration enables

the use of low voltage driver electronics for switching current density of approximately 1 mA/cm². Dean teaches a current density which is no grater than approximately 10⁵ A/cm², but the current density taught by Dean is not a current density of a power supply line.

In contrast to these actual teachings of Dean, independent claims 1, 10, and 17 of the claimed invention clearly teach a maximum average current density at a cross section of the power supply line is no grater than approximately 10⁵ A/cm².

Although Mikami teaches a power supply line, the current density of Dean is not applied in a power supply line. For at least this reason, Applicants submit that it would *not* be obvious for one with ordinary skill in the are to combine the selective teachings of these two references.

For this reason alone, claims 1, 10, and 17 patently defines over the cited art. The rejections of claims 1, 10, and 17 should be withdrawn. Claims 2-9, 11-16, and 18-19 each depend from claim 1, 10, or 17, and define over the cited art for at least the same reasons.

As a separate and independent basis for the patentability of independent claims 1, 7, and 16, the Office Action has failed to identify a proper suggestion or motivation to combine the selective teachings of Dean and Mikami. In this regard, it is well-settled law that in order to properly support an obviousness rejection under 35 U.S.C. § 103, there must have been some teaching in the prior art to suggest to one skilled in the art that the claimed invention would have been obvious. W. L. Gore & Associates, Inc. v. Garlock Thomas, Inc., 721 F.2d 1540, 1551 (Fed. Cir. 1983). More significantly,

"The consistent criteria for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that this [invention] should be carried out and would have a reasonable likelihood of success, viewed in light of the prior art. ... Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure... In determining whether such a suggestion can fairly be gleaned from the prior art, the full field of the invention must be considered; for the person of ordinary skill in the art is charged with knowledge of the entire body of technological literature, including that which might lead away from the claimed invention."

(Emphasis added) *In re Dow Chemical Company*, 837 F.2d 469, 473 (Fed. Cir. 1988).

In this regard, Applicant notes that there must not only be a suggestion to combine the functional or operational aspects of the combined references, but that the Federal Circuit also requires the prior art to suggest both the combination of elements and the structure resulting from the combination. *Stiftung v. Renishaw PLC*, 945 Fed.2d 1173 (Fed. Cir. 1991). Therefore, in order to sustain an obviousness rejection based upon a combination of any two or more prior art references, the prior art must properly suggest the desirability of combining the particular elements to create a display device as claimed by the Applicant.

When an obviousness determination is based on multiple prior art references, there must be a showing of some “teaching, suggestion, or reason” to combine the references. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1579, 42 USPQ2d 1378, 1383 (Fed. Cir. 1997) (also noting that the “absence of such a suggestion to combine is dispositive in an obviousness determination”).

Evidence of a suggestion, teaching, or motivation to combine prior art references may flow, inter alia, from the references themselves, the knowledge of one of ordinary skill in the art, or from the nature of the problem to be solved. *See In re Dembicza*k, 175 F.3d 994, 1000, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Although a reference need not expressly teach that the disclosure contained therein should be combined with another, the showing of combinability, in whatever form, must nevertheless be “clear and particular.” *Dembicza*k, 175 F.3d at 999, 50 USPQ2d at 1617.

If there was no motivation or suggestion to combine selective teachings from multiple prior art references, one of ordinary skill in the art would not have viewed the present invention as obvious. *See In re Dance*, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998); *Gambro Lundia AB*, 110 F.3d at 1579, 42 USPQ2d at 1383 (“The absence of such a suggestion

to combine is dispositive in an obviousness determination.”).

Significantly, where there is no apparent disadvantage present in a particular prior art reference, then generally there can be no motivation to combine the teaching of another reference with the particular prior art reference. *Winner Int'l Royalty Corp. v. Wang*, No 98-1553 (Fed. Cir. January 27, 2000). Well-established Federal Circuit case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). Evidence of teaching or suggestion is "essential" to avoid hindsight. *In re Fine*, 837 F.2d 1071, 1075 (Fed.Cir.1988). A description of the particular "teaching or suggestion or motivation [to combine]" is an "essential evidentiary component of an obviousness holding." *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1352 (Fed.Cir.1998). Indeed, in forming an obviousness type rejection, "the [Examiner] must identify specifically ... the reasons one of ordinary skill in the art would have been motivated to select the references and combine them." *In re Rouffet*, 149 F.3d 1350, 1359 (Fed.Cir.1998). The Examiner can satisfy this burden of establishing obviousness in light of combination "only by showing some objective teaching [leading to the combination]." *In re Fritch*, 972 F.2d 1260, 1265 (Fed.Cir.1992).

Simply stated, the Office Action has failed to comply with these legal standards. Consequently, the rejections of independent claims 1, 7, and 16 are legally improper and must be withdrawn. Claims 2-9, 11-16, and 18-19 each depend from claim 1, 10, or 17, and define over the cited art for at least the same reasons.

CONCLUSION

In view of the foregoing, it is believed that all pending claims are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

No fee is believed to be due in connection with this amendment and response to Office Action. If, however, any fee is believed to be due, you are hereby authorized to charge any such fee to deposit account No. 20-0778.

Respectfully submitted,

By:



Daniel R. McClure
Registration No. 38,962

Thomas, Kayden, Horstemeyer & Risley, LLP
100 Galleria Pkwy, NW
Suite 1750
Atlanta, GA 30339
770-933-9500